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Claims

1        1. A method of determining the ability of a compound  
2 to both bind to somatostatin type-5 receptor and inhibit  
3 amylin release from amylin-secreting pancreas cells, said  
4 method comprising:

5            obtaining a preparation which contains somatostatin  
6 type-5 receptor;

7            incubating said preparation, said compound, and a  
8 somatostatin type-5 receptor ligand, at least one of said  
9 ligand and said compound being detectably labeled;

10           determining the ability of said compound to compete  
11 against said ligand for binding to somatostatin type-5  
12 receptor;

13           if and only if said compound is determined to be able  
14 to bind to somatostatin type-5 receptor, obtaining amylin-  
15 secreting pancreatic cells;

16           incubating said compound, said pancreatic cells, and  
17 an amylin release stimulator under conditions in which said  
18 amylin release stimulator would induce release of amylin  
19 from said pancreatic cells; and

20           determining the ability of said compound to inhibit  
21 amylin release.

1        2. A method of claim 1, wherein said preparation is  
2 a cell preparation.

1        3. A method of claim 1, wherein said preparation is  
2 a membrane preparation.

1        4. A method of claim 1, wherein said preparation is  
2 derived from a rodent olfactory bulb.

1        5. A method of claim 1, wherein said preparation is  
2 derived from CHO-K1 cells transfected with the human  
3 somatostatin type-5 receptor.

1        6. A method of claim 3, wherein said preparation is  
2 derived from a rodent olfactory bulb.

1        7. A method of claim 3, wherein said preparation is  
2 derived from CHO-K1 cells transfected with the human  
3 somatostatin type-5 receptor.

1        8. A method of claim 1, wherein said ligand is  
2 detectably labeled.

1        9. A method of claim 3, wherein said ligand is  
2 detectably labeled.

1        10. A method of claim 1, wherein said pancreatic  
2 cells are pancreatic islet cells.

1        11. A method of claim 10, wherein said pancreatic  
2 islet cells are  $\beta$  cells.

1        12. A method of claim 1, wherein said pancreatic  
2 cells are amylinoma cells.

1        13. A method of claim 1, wherein said pancreatic  
2 cells are cells in an isolated rodent pancreas.

1        14. A method of claim 1, wherein said pancreatic  
2 cells are RINm5f cells.

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1        15. A method of claim 3, wherein said pancreatic  
2    cells are pancreatic islet cells.

1        16. A method of claim 15, wherein said pancreatic  
2    islet cells are  $\beta$  cells.

1        17. A method of claim 3, wherein said pancreatic  
2    cells are amylinoma cells.

1        18. A method of claim 3, wherein said pancreatic  
2    cells are cells in an isolated rodent pancreas.

1        19. A method of claim 3, wherein said pancreatic  
2    cells are RINm5f cells.

1        20. A method of treating hyperamylinemia in a  
2    subject, said method comprising administering to said  
3    subject an amount of a somatostatin type-5 receptor agonist,  
4    said amount being effective in treating hyperamylinemia.

1        21. A method of claim 20, wherein said somatostatin  
2    type-5 agonist is at least 3 times as selective for  
3    somatostatin type-5 receptor as for somatostatin type-2  
4    receptor.

1        22. A method of claim 21, wherein said somatostatin  
2    type-5 agonist is at least 10 times as selective for  
3    somatostatin type-5 receptor as for somatostatin type-2  
4    receptor.